

**AMENDED CLAIMS**

Claims 1-18 (cancelled)

19. (currently amended) A method for in vitro fertilisation comprising the step of: exposing and culturing one or more ~~MII-MII~~ oocytes with spermatozoa in a culture medium, the culture medium comprising at least one MAS, a MAS analogue, or an additive or additives capable of endogenous stimulation of the accumulation of at least one MAS; the exposure and culturing lasting until zygotes and/or pre-embryos are formed.

Claim 20 is cancelled

21. (previously amended) A method according to Claim 19, wherein the MII oocytes are cumulus enclosed oocytes.

Claim 22 is cancelled.

23. (currently amended) A method according to Claim 19, wherein ~~the culture medium~~ MAS is selected from the group consisting of comprises FF-MAS, T-MAS, 1-methylzymosterol and and/or zymosterol or mixtures thereof.

24. (previously amended) A method according to Claim 19, wherein MAS is FF-MAS.

25. (previously amended) A method according to Claim 19, wherein MAS is T-MAS.

26. (previously amended) A method according to Claim 19, wherein the culture medium comprises a MAS analogue.

27. (currently amended) A method according to Claim 19, wherein the oocytes are nude.

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28. (currently amended) A method according to Claim 19, wherein the culture medium comprises at least one MAS or at least one MAS analogue.

29. (currently amended) A method according to Claim 19, wherein 1-15 oocytes are cultured and exposed together.

30. (re-presented-formerly dependent claim 22) A method according to Claim 19, wherein the culture medium comprises an additive or additives capable of endogenous stimulation of the accumulation of at least one MAS.

31. (new) The method according to claim 21, wherein the additive or additives leads to a ratio of at least 2 between the relative content of MAS in cumulus enclosed oocytes cultured in the presence of the additive or additives, the relative content of MAS in cultured cumulus enclosed oocytes being determined by stimulating female mice with exogenous gonadotropins 48h prior to removal of the ovaries from the mice and recovering cumulus enclosed oocytes from the ovaries by puncturing individual follicles and culturing the recovered cumulus enclosed oocytes in an  $\alpha$ -MEM medium supplemented with 3mg/l bovine serum albumin, 5 mg/l human serum albumin, 2mM L-glutamine, 100IU/ml penicillin, 100 $\mu$ g/ml streptomycin, 4mM hypoxanthine and  $^3$ H-mevalonate for 24h at 37°C, 100% humidity and 5% CO<sub>2</sub> in air, followed acidification with 50 $\mu$ l 0.3M Na<sub>2</sub>PO<sub>4</sub> pH=1, organic extraction three times with a five-fold surplus of n-heptane:isopropanol (3:1 v/v), purification of MAS from the organic phase by HPLC and determination of the ratio of radioactivity per cumulus enclosed oocyte between cumulus enclosed oocytes cultured in the presence of the additive or additives and cumulus enclosed oocytes cultured without the presence of the additive or additives.

32. (new) The method according to claim 19, wherein the additive is a combination of a gonadotropin and a growth hormone.
33. (new) The method according to claim 19, wherein the additive is a combination of EGF and FSH.
34. (new) The method according to claim 19, wherein the additive is EGF.
35. (new) The method according to claim 19, wherein the additive is FSH.
36. (new) The method according to claim 35, wherein FSH is an FSH isoform with an isoelectric point above 5.0.
37. (new) The method according to claim 35, wherein the FSH is derived from naturally occurring FSH.
38. (new) The method according to claim 35, wherein FSH is derived from FSH extracted from urine, or from recombinant FSH.
39. (new) The method according to claim 19, wherein the culture medium comprises FSH at a concentration between 2 and 200IU FSH/l.
40. (new) The method according to claim 19, wherein the culture medium comprises EGF at a concentration between 1 and 10ng EGF/ml.

41. (new) The method according to claim 19, wherein the additive is amphotericin.
42. (new) The method according to claim 19, wherein the *in vitro* fertilisation is *in vitro* fertilisation of human oocytes.
43. (re-presented-formerly claim 20) A method for *in vitro* fertilisation comprising the steps of: (a) one or more GV oocytes in a culture medium, the culture medium comprising at least one MAS, a MAS analogue, or an additive or additives capable of endogenous stimulation of the accumulation of at least one MAS; hereby forming one or more oocytes; (b) exposing and the one or more Mil oocytes of step (a) with spermatozoa in a culture medium, the culture medium comprising at least one MAS, a MAS analogue, or an additive or additives capable of endogenous stimulation of the accumulation of at least one MAS; the exposure and lasting until zygotes and/or pre-embryos are formed.